

# LETTERS



## One world?

Ecologists discuss a News article in our special section "Frontiers in biology: Ecology" (21 July, pp. 313-360) and subsequent letters (1 Sept., p. 1201). While 24 letter writers describe one dispute as a "minor squabble," the views expressed in other letters belie this description.

## The Role of Experiments in Ecology

We thank *Science* for giving ecology coverage in the "Frontiers in Biology: Ecology" special section (21 July, pp. 313-360). It was unfortunate that the lead News article by Wade Roush, "When rigor meets reality," highlights a minor squabble that stemmed from the remarks of one postdoctoral researcher. We encourage the editors and reporters of *Science* to continue coming to ecological meetings so that they can broaden their knowledge and expand their coverage of the substantive issues. Ecology is a true frontier, being perhaps the most complex system that science has ever tried to understand. Increasingly, ecologists are combining experiments, observations, and theory to expand the temporal and spatial scale of our inferences. We are strongly motivated by the pressing need for answers to major questions of direct relevance to the long-term sustainability and habitability of Earth.

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Roush's article portrays the American Society of Zoologists' symposium "The State of Experimental Ecology" as an "organizational rally of sorts" for the "new experimentalists" and as part of a "revisionist movement" advocating a return to more "muddy-boots biology." As co-organizer of the symposium, I strongly disagree with this portrayal. Although the coverage given to this symposium is appreciated, the article confers a negative tone on the proceedings and does not convey the scope and goals of the symposium. I also disagree with the article's presentation of the important issues in experimental ecology.

The symposium brought together experimental ecologists representing the broad array of experimental approaches used in ecology, from laboratory microcosms to manipulation of entire ecosystems, in order to illustrate the myriad ways in which experiments are applied to ecological questions. The symposium specifically emphasized the value of a plurality of experimental approaches; it was definitely not about attacking other ecologists or "challeng[ing] . . . colleagues' methods" (nor were my own discussions with Roush). It was experimental ecologists critiquing themselves to move experimental ecology forward on all fronts, from better designs, to better links between experiments and theory, to more realism in experiments designed to explore specific natural systems. It was also a forum in which to discuss the limitations and obstacles to applying experiments to specific ecological systems and questions. Our only agenda was to reinforce the importance of experiments and experimental rigor in un-